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Meier et al.

[45] Date of Patent: **Mar. 15, 1994****[54] RADIO FREQUENCY LOCAL AREA NETWORK****[75] Inventors:** Robert C. Meier; Marvin L. Sojka; Ronald E. Luse, all of Cedar Rapids, Iowa**[73] Assignee:** Norand Corporation, Cedar Rapids, Iowa**[21] Appl. No.:** 56,827**[22] Filed:** May 3, 1993**Related U.S. Application Data****[63]** Continuation of Ser. No. 769,425, Oct. 1, 1991.**[51] Int. Cl.⁵** **H04K 1/00****[52] U.S. Cl.** **375/1; 370/60; 370/95.1; 370/77; 370/93; 340/825****[58] Field of Search** **375/1; 370/60, 85.6, 370/94.1, 95.1, 77, 93; 379/221, 209; 340/825****[56] References Cited****U.S. PATENT DOCUMENTS**

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[57]**ABSTRACT**

An apparatus and a method for routing data in a radio data communication system having one or more host computers, one or more intermediate base stations, and one or more RF terminals organizes the intermediate base stations into an optimal spanning-tree network to control the routing of data to and from the RF terminals and the host computer efficiently and dynamically. Communication between the host computer and the RF terminals is achieved by using the network of intermediate base stations to transmit the data.

7 Claims, 1 Drawing Sheet